

ENTERED

January 17, 2018

David J. Bradley, Clerk

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

GRYPHON OILFIELD SOLUTIONS, §
LLC, §
Plaintiff, §

v. §

STAGE COMPLETIONS (USA) §
CORPORATION, *et al.*, §
Defendants. §

CIVIL ACTION NO. H-17-3220

MEMORANDUM AND ORDER

This patent case is before the Court on the Motion for Preliminary Injunction (“Motion”) [Doc. # 10] filed by Plaintiff Gryphon Oilfield Solutions, LLC (“Gryphon”), to which Defendant Stage Completions (USA) Corporation (“Stage”) filed a Response [Doc. # 42], Gryphon filed a Reply [Doc. # 47], Stage filed a Sur-Reply [Doc. # 55], and Gryphon filed a Submission of Supplemental Rebuttal Evidence [Doc. # 58]. The Court heard oral argument on the Motion on December 19, 2017. Having carefully reviewed the record and applicable legal authorities, the Court **denies** the Motion for Preliminary Injunction.

¹ Defendant Stage Completions, Inc. is a Canadian corporation and has filed a Motion to Dismiss [Doc. # 59]. Stage Completions, Inc. argues that the case against it should be dismissed for lack of proper service and for lack of personal jurisdiction. The Motion to Dismiss has not been fully briefed and is not yet ripe for decision.

I. BACKGROUND

Gryphon is the current owner of United States Patent No. 9,611,727 (“the ’727 Patent”), having purchased the patent rights from a bankruptcy estate. The ’727 Patent covers an apparatus and method for fracturing hydrocarbon formations utilizing sliding frac sleeves. Unlike earlier devices that used graduated ball seats that could receive a ball dropped downhole to create a seal in the wellbore, the device covered by the ’727 Patent uses darts with dart profiles extending radially outward that mate with key profiles on the piston of the frac sleeve. The darts travel downhole until they reach matching key profiles, whereupon they latch into the respective piston of the frac sleeve to create the seal. Gryphon has developed a system, SUREselect, covered by the ’727 Patent, but at the time of the hearing had not successfully field tested it or made any sales of that system.

Gryphon filed this lawsuit, alleging that Defendants’ Bowhead II system infringes Claim 7 of the ’727 Patent. The Bowhead II system consists of a ball-on-collet assembly in which a ring-shaped collet and ball are dropped downhole. The protrusions on the collet engage with the grooves in the valve sleeve, the ball seats in the collet, and a nearby valve in the sleeve opens to allow fracking. When fracking is complete, the ball dissolves and the collet remains in place. The interior diameter of the collet is sufficiently large to allow unrestricted flow through the wellbore.

Gryphon filed its Motion for Preliminary Injunction. The Motion has been fully briefed, and the Court has heard oral arguments. Consequently, Gryphon's Motion is now ripe for decision.

II. STANDARD FOR PRELIMINARY INJUNCTION

To obtain a preliminary injunction in a patent case, the plaintiff must establish “that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest.” *Revision Military, Inc. v. Balboa Mfg. Co.*, 700 F.3d 524, 525 (Fed. Cir. 2012) (quoting *Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008)). A preliminary injunction enjoining patent infringement “involves substantive matters unique to patent law and, therefore, is governed by the law of [the Federal Circuit].” *Id.* (quoting *Hybritech Inc. v. Abbott Labs.*, 849 F.2d 1446, 1451 n.12 (Fed. Cir. 1988)).

III. ANALYSIS

A. Likelihood of Success on the Merits

Gryphon asserts that the Bowhead II system infringes Claim 7 of the '727 Patent. Stage denies infringement.² To prove patent infringement, a comparison of

² In addition to arguing that the Bowhead II system does not infringe Claim 7 of the '727 Patent, Stage argues that the '727 Patent – if it is construed as asserted by (continued...)

the asserted claims to the accused device must show that every claim limitation or its equivalent is found in the accused device. *See Planet Bingo, LLC v. GameTech Int'l, Inc.*, 472 F.3d 1338, 1343 (Fed. Cir. 2006). The comparison is only to the patent claims, not to any specific embodiment in the patent specification or to the patent holder's commercial embodiment. *See Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1347 (Fed. Cir. 2003). The patent holder bears the burden of proving infringement by the preponderance of the evidence. *See Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, __ U.S. __, 134 S. Ct. 1749, 1758 (2014); *Cephalon, Inc. v. Watson Pharms., Inc.*, 707 F.3d 1330, 1340 (Fed. Cir. 2013) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1327 (Fed. Cir. 2008)).

Claim 7 of the '727 Patent claims:

7. A system of valves and at least one dart for use downhole in a well, the system comprising:

at least two valves, each valve comprising:

- a) a tubular valve body comprising upper and lower ends defining communication therebetween, the valve body further comprising at least one port extending through a sidewall thereof nearer the upper end;

²

(...continued)

Gryphon – is invalid based on prior art. Gryphon argues that Stage is estopped to challenge the validity of the '727 Patent. The Court does not reach this issue at this stage of the proceedings and will base its analysis of the “likelihood of success on the merits” factor only on the non-infringement arguments.

- b) a tubular piston slidably disposed in the valve body and configured to provide communication therethrough, the piston closing the at least one port in a closed position, the piston opening the at least one port in an open position;
- c) a key profile disposed on an interior sidewall of the piston and comprising at least two grooves and a locking shoulder, the key profile for moving the piston from the closed position to the open position when a downward force is placed on the piston; and
- d) a tubular end cap disposed on the lower end of the valve body, the end cap configured to stop the piston when the piston moves from the closed position to the open position;

where the key profiles of the at least two valves have the locking shoulders in different locations relative to the two grooves within their key profile, and

the at least one dart comprising a longitudinal shaft comprising upper and lower ends, the lower end comprising a dart profile, the dart profile configured to engage grooves and locking shoulder of a matching key profile, the upper end comprising at least one dart cup configured to seal off communication through the piston when the dart profile has engaged the corresponding key profile,

where the location of the two grooves and locking shoulder in the dart profile is configured to specifically bypass unmatching key profiles and specifically engage the key profile of a targeted valve.

U.S. Patent No. 9,611,727, Claim 7.

The Court finds, based on the current record, that Gryphon has failed to demonstrate a likelihood of success on the merits of its infringement claim against Stage. The Court notes that it has not yet conducted a claim construction hearing. As a result, the Court's findings herein are limited to this preliminary injunction phase. The Court's statements regarding claim terms will not bind the Court in later phases

of this litigation, and they are not to be viewed as the Court’s final construction of disputed claim terms. Final claim construction rulings will not be issued until the Court has conducted a full claim construction hearing.

1. Two Grooves and a Locking Shoulder

Claim 7 includes the limitation that there are two grooves and a locking shoulder. Gryphon argues that the two grooves and the locking shoulder need not be separate elements but, instead, the locking shoulder can be part of one of the two grooves. Gryphon has not shown a likelihood of success on this argument because its proposed interpretation is inconsistent with the clear claim language and the prosecution history. Claim 7 requires that the locking shoulder be in a different location “relative to the two grooves.”³ This would not be possible if the locking shoulder were part of one of the two grooves because, in that case, the locking shoulder could not be in a different location “relative to” the groove of which it is a part.

Additionally, in the prosecution history, the claim that ultimately issued as Claim 7 was amended to clarify that each key profile is different based on the location of the locking shoulder relative to the two grooves within that key profile. This

³ It is notable that the claim does not say that the shoulder must be in a different location “relative to at least one of the grooves.”

amendment was necessary to distinguish prior art that disclosed a locking shoulder that was part of a single groove.

Based on the claim language and the prosecution history, the Court finds that Gryphon has not demonstrated a likelihood of success on the merits of its infringement claim regarding Claim 7 of the '727 Patent.

2. Key Profile

The lack of likelihood of success also relates to the '727 Patent Claim 7 requirement of a “key profile” which, like a door key, includes a matching relationship between the protrusions, or darts, and the grooves. Indeed, the claim language requires that “the dart profile is configured to specifically bypass unmatching key profiles and specifically engage the key profile of the targeted valve.” Gryphon has not demonstrated a likelihood of success on its argument that the Bowhead II system includes a one-to-one, matching relationship between the protrusions and the cavities. Instead, it appears from the evidence submitted that the protrusions on the Bowhead II can engage with any cavity that is wide enough to accept it.

3. Dart Cup

Further, Claim 7 of the '727 Patent contains the limitation that there be “at least one dart cup configured to seal off communication through the piston when the dart profile has engaged the corresponding key profile.” A “dart cup” is a specific type of

seal, specifically a circular seal with a depressed center and raised sealing lips that are designed to contain high pressure in one direction but not in the other.⁴ Gryphon's infringement argument is based on its position that the term "dart cup" include many other types of seals, including the bonded seal on the Bowhead II collet. Gryphon has failed to demonstrate a likelihood of success on the merits of this argument.

There is no evidence that the Bowhead II system includes a "dart cup" as that term appears to be understood in the industry. The bonded seal used in the Bowhead II system is shaped differently and performs in a manner distinct from the "dart cup" limitation in Claim 7. A "dart cup" will flare out to create a seal when pressure is applied. A compression seal such as the bonded seal used in the Bowhead II system will compress, not flare out.

Gryphon has not demonstrated, on this record, that the specific term "dart cup" as used in Claim 7 of the '727 Patent, and the more general term "seal" are synonymous and interchangeable. As a result, Gryphon has not shown a likelihood of success on its argument that the Bowhead II system infringes Claim 7 of the '727 Patent.

⁴ See Declaration of David J. Speller, Defendant's expert witness, Exh. H to Defendant's Sur-Reply, ¶ 29.

B. Likelihood of Irreparable Harm

Gryphon argues that it will suffer irreparable harm if there is no injunction against Stage's marketing of the Bowhead II system because Gryphon will lose market share and because problems with the Bowhead II system will have a negative impact on Gryphon's reputation. Gryphon has failed to demonstrate the likelihood of irreparable harm on either basis.

Originally, Gryphon argued that sales of the Bowhead II system were depriving it of market share in the developing market for "profile selective frac sleeves." Gryphon asserts that Stage is its only competitor in this market. In support of its argument regarding loss of market share as irreparable harm, Gryphon cites *Celsis In Vitro, Inc. v. CellzDirect, Inc.*, 664 F.3d 922 (Fed. Cir. 2012), and *Trebro Mfg., Inc. v. Firefly Equip., LLC*, 748 F.3d 1159 (Fed. Cir. 2014). In each of those cases, however, the patent holder was actually selling product in the identified relevant market, giving the patent holder market share that could be lost to the alleged infringer. Here, to the contrary, Gryphon currently has no share of the market for "profile selective frac sleeves" because it has not sold any devices covered by the '727 Patent in that identified market. Although Gryphon claims that it is developing a new product for the "profile selective frac sleeves" market, it is undisputed that the new product at the time of the hearing had not yet reached the field testing phase.

In its Reply, Gryphon redefines the relevant market as the broader “completions market,” in which it does currently sell products. There is no evidence that sales of the Bowhead II system have caused – or are causing – Gryphon to lose market share in this redefined market. In this broader market, Gryphon competes with many large competitors such as National Oilwell Varco, Baker Hughes, Schlumberger, Weatherford, Halliburton and others. As a result, Gryphon has failed to demonstrate that any potential loss of market share in the broad “completions market” would be the result of sales of Stage’s system rather than sales of similar products by any of the major competitors in that market.

With reference to irreparable harm to its reputation, Gryphon alleges that there have been “documented problems” with the Bowhead II system. The only problem identified involved the first field test of the system in a wellbore for Blackbird Energy Inc., in which some of the valves failed. After an investigation revealed that there was an erosion issue, the problem was resolved to Blackbird’s satisfaction. Indeed, Blackbird now uses the Bowhead II system exclusively, has openly praised the system, and has taken a 10% equity interest in Stage.

On the other hand, the only field test installation of Gryphon’s SUREselect system covered by the ’727 Patent, in February 2014, was unsuccessful. None of the darts engaged with the corresponding valve sleeve and, as a result, none of the valves

opened. The attempt to retrieve all of the darts from the wellbore was only partially successful, causing damage that led to the payment of approximately \$500,000.00 to the energy company for which the SUREselect system was installed. Since that time, almost four years ago, no company has purchased or installed the SUREselect system. As a result, the Court finds that Gryphon has failed to demonstrate a likelihood that it will suffer an irreparable injury to its reputation if an injunction is not granted and Stage continues to market its Bowhead II system.

Gryphon has failed to establish that it is likely to suffer irreparable harm absent an injunction preventing Stage from marketing the Bowhead II system. Gryphon does not currently sell a device in the “profile selective frac sleeve” market, and there is no evidence that it is losing market share in the broader “completions” market that is attributable to Stage’s Bowhead II system. Gryphon has not shown a likelihood that continued sales of the Bowhead II system will have a negative impact on its reputation in either of the identified markets. Consequently, Gryphon has failed to establish a likelihood of irreparable harm, the second factor in the preliminary injunction analysis.

C. Balance of Equities

As discussed above, Gryphon is not currently selling the SUREselect system and has not demonstrated the likelihood of irreparable harm if an injunction is not

issued. Stage, on the other hand, currently has eighteen Master Service contracts which involve the installation of the Bowhead II system. Stage will suffer harm if it is prohibited from complying with its contractual obligations under these Master Service agreements. Additionally, the Bowhead II system is Stage's only product, which it spent considerable time and revenue developing. An injunction against marketing the Bowhead II system would likely destroy Stage as a viable company.

Based on these considerations, the Court finds that the balance of the equities weighs heavily in Stage's favor. This balancing of the equities weighs in Stage's favor particularly since Gryphon has failed to show a likelihood of success on the merits of its infringement claim.

D. Public Interest

The public interest generally favors protecting patent rights. *See, e.g., Celsis In Vitro*, 664 F.3d at 931. This is not always true, however, particularly where the patent holder has no viable product in the marketplace. *See, e.g., eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 396-97 (2006) (Kennedy, J., concurring).

The public interest favors competition and, in this case the resulting potential for lower oil prices, where an asserted patent may be invalid or the accused system may be non-infringing.

The public interest does not weigh in favor of either party in this case. As a result, this factor does not support issuance of the preliminary injunction requested by Gryphon.

IV. CONCLUSION AND ORDER

Gryphon has failed to demonstrate a likelihood of success on the merits of its patent infringement claim or a likelihood that it will suffer irreparable harm as a result of a preliminary injunction being denied. Neither the balance of equities nor the public interest favor issuance of the preliminary injunction Gryphon requests. As a result, it is hereby

ORDERED that Plaintiff's Motion for Preliminary Injunction [Doc. # 10] is **DENIED**.

SIGNED at Houston, Texas, this **17th** day of **January, 2018**.



NANCY F. ATLAS
SENIOR UNITED STATES DISTRICT JUDGE